

IN THE CLAIMS:

1. (Currently amended) A method in a data processing system for managing a request including a session identification, comprising:
- calculating a first value based on the session identification; [[and]]
 - routing the request to a first server based on the first value;
 - determining whether the first server is functional;
 - calculating a second value based on the first value in response to the first server being non-functional; and
 - routing the request to a second server based on the second value.
2. (Original) The method of claim 1, wherein the step of calculating a first value comprises performing a hash function on the session identification.
3. (Previously presented) The method of claim 2, wherein the step of routing the request to a first server comprises:
- performing a modulus function on the first value to form a first integer; and
 - selecting a first server based on the first integer.
4. (Original) The method of claim 3, wherein the step of selecting a server comprises looking up the server in a look-up table using the first integer.
5. (Original) The method of claim 1, wherein the step of routing the request to a server comprises:
- selecting a first server based on the first value;
 - determining whether the first server is functional; and
 - routing the request to the first server in response to the first server being functional.
6. (Canceled)

7. (Original) The method of claim 5, wherein the step of determining whether the first server is functional comprises using a look-up table.

8. (Currently amended) A method in a data processing system for routing a request to one of a number of servers, comprising:

receiving a request including a session identification;

performing a hash function on the session identification to form a first hash value;

performing a modulus function on the first hash value to form a first integer;

[[and]]

routing the request to a first server based on the first integer in response to the first server being functional;

performing a hash function on the first hash value to form a second hash value in response to the first server being non-functional;

performing a modulus function on the second hash value to form a second integer;

and

routing the request to a second server based on the second integer.

9. (Original) The method of claim 8, wherein the integer is between zero and the number of servers minus one.

10. (Original) The method of claim 8, wherein the step of routing the request comprises looking up the server in a look-up table using the integer.

11. (Currently amended) An apparatus for managing a request including a session identification, comprising:

first calculation means for calculating a first value based on the session identification; [[and]]

first routing means for routing the request to a server based on the first value;

determining means for determining whether the first server is functional;

second calculation means for calculating a second value based on the first value in response to the first server being non-functional; and

second routing means for routing the request to a second server based on the second value.

12. (Previously presented) The apparatus of claim 11, wherein the first calculation means comprises hash means for performing a hash function on the session identification.

13. (Previously presented) The apparatus of claim 12, wherein the first routing means comprises:

modulus means for performing a modulus function on the first value to form a first integer; and

selection means for selecting a first server based on the first integer.

14. (Original) The apparatus of claim 13, wherein the selection means comprises table means for looking up the server in a look-up table using the first integer.

15. (Previously presented) The apparatus of claim 11, wherein the first routing means comprises:

selection means for selecting a first server based on the first value;

determining means for determining whether the first server is functional; and

means for routing the request to the first server in response to the first server being functional.

16. (Canceled)

17. (Original) The apparatus of claim 15, wherein the determining means uses a look-up table.

18. (Currently amended) An apparatus for routing a request to one of a number of servers, comprising:

a processor; and

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a memory electrically connected to the processor, the memory having stored therein a program to be executed on the processor for performing:

- receiving a request including a session identification;
- performing a hash function on the session identification to form a first hash value;
- performing a modulus function on the first hash value to form a first integer; [[and]]
- routing the request to a first server based on the first integer in response to the first server being functional;
- performing a hash function on the first hash value to form a second hash value in response to the first server being non-functional;
- performing a modulus function on the second hash value to form a second integer; and
- routing the request to a second server based on the second integer.

19. (Original) The apparatus of claim 18, wherein the integer is between zero and the number of servers minus one.

20. (Original) The apparatus of claim 18, wherein the step of routing the request comprises looking up the server in a look-up table using the integer.

21-24. (Canceled)

25. (Currently amended) A computer program product, in a computer readable medium, for managing a request including a session identification, comprising:

- instructions for calculating a first value based on the session identification; [[and]]
- instructions for routing the request to a server based on the first value; [[.]]
- instructions for determining whether the first server is functional;
- instructions for calculating a second value based on the first value in response to the first server being non-functional; and
- instructions for routing the request to a second server based on the second value.

26. (Currently amended) A computer program product, in a computer readable medium, for routing a request to one of a number of servers, comprising:
- instructions for receiving a request including a session identification;
 - instructions for performing a hash function on the session identification to form a first hash value;
 - instructions for performing a modulus function on the first hash value to form a first integer; [[and]]
 - instructions for routing the request to a first server based on the first integer in response to the first server being functional;
 - instructions for performing a hash function on the first hash value to form a second hash value in response to the first server being non-functional;
 - instructions for performing a modulus function on the second hash value to form a second integer; and
 - instructions for routing the request to a second server based on the second integer.